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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,197	04/20/2001	David W. Cannell	05725.0505-00	1548
22852	7590	07/22/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			ELHILO, EISA B	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/838,197

Applicant(s)

CANNELL ET AL.

Examiner

Eisa B Elhilo

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-160 is/are pending in the application.
- 4a) Of the above claim(s) 75-156, 159 and 160 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-74, 157 and 158 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/5/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/5/2004 has been entered.

2 Claims 75-156 and 159-160 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected claims, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7. The pending claims are 1-74, 157 and 158.

Claim Rejections - 35 USC § 102

3 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 9-15, 17-24, 26-32, 34-40, 44-50, 52-59, 61-67, 69-73 and 157-158 are rejected under 35 U.S.C. 102(b) as being anticipated by Kolc et al. (US 5,223,252). Kolc (US' 252) teaches a mild alkaline reducing composition for permanently waving or reshaping human hair. The composition comprises mercaptan derivatives such as 2-amino-3-mercaptopropic acid, from about 2.0% to about 3.0% of cysteine compound (see col. 4, lines 31-49), amines such as alkanolamine and ammonia, metal hydroxides (see col. 5, lines 65-68) and alcohols such as ethanol and isopropanol (see col. 7, lines 32-33) and other constituents such as

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fatty alcohols (see col. 6, lines 2-3) and ammonium carbonate (see col. 5, lines 65-66). Kolc teaches all the limitations of the instant claims. Hence, Kolc anticipates the claims.

Claim Rejections - 35 USC § 103

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-8, 16, 25, 33, 41-43, 51, 60, 68 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolc et al. (US 5,223,252) in view of Mougin et al. (5,753,215).

The disclosure of Kolc (US' 252) is summarized above. The reference fails to teach a composition comprising organic nucleophiles such as arginine and lysine as claimed in claims 6-8 and 41-43. Further, the reference fails to teach alkali metal salts, alkaline earth metal salts, organic addition salts or inorganic addition salts as claimed in claims 16, 25, 33, 51, 60 and 68. Furthermore, the reference does not teach or disclose organic nucleophile in an amount of 0.2% as claimed in claim 74.

However, the reference teaches a composition comprising organic nucleophile such as cysteine compound (see col. 4, lines 31-49). Further, the reference teaches a composition comprising acids, bases and buffers (see col. 7, lines 25-26) that generate the desired salts.

Mougin (US' 215) in analogous art of hair cosmetic composition teaches a hair straightening composition (see col. 6, lines 45-49). The composition comprises organic nucleophiles such as lysine, arginine or cystine and polyvalent metal salts such as chloride, nitrates, acetate, carbonate and sulphates (see col. 4, lines 26-31).

Therefore, in view of the teachings of the secondary reference, one having ordinary skill in the art at the time the invention was made would have been motivated to modify the primary reference by incorporating the lysine, arginine compounds and polyvalent salts as taught by Mougín to make such a composition. Such a modification would be obvious because the primary reference teaches and suggests the use of cysteine, which is a similar compound to cystine as taught by Mougín. Also, the primary reference teaches a composition that comprises acids, bases, buffers and metal hydroxides which all react together to generate the metal salts and, thus, a person of ordinary skill in the art would expect such a composition to have similar properties to those claimed, absent unexpected results.

With respect to claim 74, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of the nucleophile used in the composition in order to get the maximum effective amount, *See In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980).

Response to Applicant's Arguments

5 Applicant's arguments filed on February 5, 2004 have been fully considered but they are not persuasive.

With respect to the rejection of the claims under 35 U.S.C. 102(b) as being anticipated by Kolc et al. (US' 252), Applicants argue that Kolc teaches a composition that comprises ammonium hydroxide in an amount to provide a pH of 7.5 which is not sufficient to lanthionize hair. To support this argument applicants submitted pages from "Milady's Hair Structure and Chemistry Simplified," pp.191-192 which define the differences between chemical relaxers and

lanthionization and to indicate that only highly alkaline products such as sodium hydroxide and potassium hydroxide that afford pH levels between 12 and 13.5, can cause lanthionization.

The examiner respectfully disagrees with the above argument because the same document of "Milady's Hair Structure and Chemistry Simplified," teaches that the low pH reducers are used as the relaxers and are recommended for thin or brittle hair (see page 11, paragraph 5). Therefore, the composition of Kolc et al. (US' 252) can be used for lanthionizing the keratin fibers as claimed and, thus, the rejection is proper.

With respect to the rejection of the claims under 35 U.S.C. 103(a) as being unpatentable over Kolc et al. (US' 252) in view of Mougin et al. (US' 215), applicants argue that the combination of the references is improper because Kolc does not describe compositions for lanthionizing keratin fibers and Mougin is directed to compositions having excellent remanence properties. Further, the applicants argue that lanthionization requires such a high pH levels, which is not even suggested in Mougin's disclosure.

The examiner respectfully disagrees with the above argument because both references are in the same art of hair cosmetic compositions that are used for waving or reshaping the hair as taught by Kolc (see abstract) and also used for styling or shaping hair as taught by Mougin (see abstract) wherein the compositions comprise similar ingredients such as organic nucleophiles of lysine, arginine and cystine [3,3'-dithiobis(2-aminopropanoic acid)] and sodium hydroxide and potassium hydroxide as a hydroxide ion generator as taught by Mougin (see col. 4, lines 26-35) and cysteine (α -amino- β -thiolpropionic acid) and a metal hydroxide as a hydroxide ion generator as taught by Kolc (see col. 4, lines 35-40 and col. 5, lines 65-66). Further, the higher ranges of the pH's have not been recited in any of the instant claims. Furthermore, applicants have not

shown in record the criticality of the high pH of the claimed composition over the compositions of the prior art of record when the claimed composition is applied to the hair. Therefore, the prima facie case of obviousness has been established.

6 This is a continuation of applicant's earlier Application No. 09/838,197. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

The remaining references listed on from 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

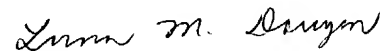
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo
July 21, 2004



LORNA M. DOUYON
PRIMARY EXAMINER